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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,121	02/10/2004	Richard M. Webber	H-365	2120

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EXAMINER	
THOMAS, BRANDI N	

ART UNIT	PAPER NUMBER
2873	

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.	Applicant(s)	
	10/708,121	WEBBER ET AL.	
	Examiner	Art Unit	
	Brandi N. Thomas	2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *Amendment filed on 9/19/05*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13 and 22-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,5,6,8-13 and 22-30* is/are rejected.

7)☒ Claim(s) *2,4 and 7* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: *Detailed Action*.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 3, 5, 6, 8-13, and 22-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duthaler et al. (US 2003/0214697 A1) in view of Hakamata (6204556 B1).

Regarding claims 1 and 22, Duthaler et al. discloses, in figures 18A-18C, an electro-optic display comprising a layer of solid electro-optic material (410) (section 0159), at least one electrode (430) disposed adjacent the layer of electro-optic material (410) (section 0159 and 0160), and a layer of a lamination adhesive (450) interposed between the electro-optic material (410) and the electrode (430) (section 0160) but does not specifically disclose the lamination adhesive having a higher electrical conductivity in a direction perpendicular to the layer of lamination adhesive than in the plane of the layer. Hakamata discloses, in figures 1 and 2, the lamination adhesive (30) having a higher electrical conductivity in a direction perpendicular to the layer of lamination adhesive (30) than in the plane of the layer (col. 3, lines 13-18 and 51-55). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the device of Duthaler et al. with the lamination adhesive of Hakamata for the purpose of the adhesive film exhibiting electrical conductivity only in the direction of thickness (col. 1, lines 64-66 and col. 3, lines 13-18 and 51-55).

Regarding claim 3, Duthaler et al. discloses, in figures 18A-18C, an electro-optic display, wherein the lamination adhesive (450) comprises a plurality of conductive particles dispersed in a substantially non-conductive matrix (section 0171).

Regarding claim 5, Duthaler et al. discloses, in figures 1-3, an electro-optic display, wherein the conductive particles (50) are formed from a semiconducting polymer (section 0013 and 0057).

Regarding claim 6, Duthaler et al. discloses, in figures 1-3, an electro-optic display, wherein the conductive particles (50) are formed from a low conductivity material having a polar material absorbed on its surface to increase its conductivity (sections 0071, 0076, and 0084).

Regarding claims 8 and 9, Duthaler et al. and Hakamata disclose the claimed invention but do not specifically disclose the matrix comprising a gellable material. It would have been obvious to modify the matrix to comprise a gellable material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use (In re Leshin, 125 USPQ 416). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the matrix to comprise a gellable material for the purpose insuring that the matrix has the capabilities to maintain its shape and form.

Regarding claim 10, Duthaler et al. discloses, in figures 18A-18C, an electro-optic display, wherein the lamination adhesive (450) comprises a plurality of magnetizable particles dispersed in a substantially non-magnetizable matrix (section 0171).

Regarding claim 11, Duthaler et al. discloses, in figures 18A-18C, an electro-optic display, wherein the magnetizable particles comprise an iron oxide (section 0171).

Regarding claim 12, Duthaler et al. discloses, in figures 18A-18C, an electro-optic display, wherein the electro-optic material (410) is a rotating bichromal member, microcell, electrochromic, or electrophoretic material (section 0159).

Regarding claim 13, Duthaler et al. discloses, in figures 18A-18C, an electro-optic display, wherein the electro-optic material (410) is an encapsulating electrophoretic material (section 0159).

Regarding claim 23, Duthaler et al. discloses, in figures 18A-18C, an article of manufacture comprising a layer of solid electro-optic material (410) (section 0159), at least one electrode (430) disposed adjacent the layer of electro-optic material (410) (section 0159 and 0160), and a layer of a lamination adhesive (450) interposed between the electro-optic material (410) and the electrode (430) (section 0160) but does not specifically disclose the lamination adhesive having a higher electrical conductivity in a direction perpendicular to the layer of lamination adhesive than in the plane of the layer and a second adhesive layer. It would have been obvious to include a second adhesive layer for the purpose of securing the electro optic medium. Hakamata discloses, in figures 1 and 2, the lamination adhesive (30) having a higher electrical conductivity in a direction perpendicular to the layer of lamination adhesive (30) than in the plane of the layer (col. 3, lines 13-18 and 51-55). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the device of Duthaler et al. with the lamination adhesive of Hakamata for the purpose of the adhesive film exhibiting electrical conductivity only in the direction of thickness (col. 1, lines 64-66 and col. 3, lines 13-18 and 51-55).

Regarding claims 24 and 27, Duthaler et al. discloses, in figures 18A-18C, an article of manufacture, wherein the solid electro-optic medium is a rotating bichromal member, microcell, electrochromic or electrophoretic medium (section 0218).

Regarding claims 25 and 28, Duthaler et al. discloses, in figures 18A-18C, an article of manufacture, wherein the solid electro-optic medium is an encapsulated electrophoretic medium (section 0055).

Regarding claims 26, 29, and 30, Duthaler et al. discloses, in figures 18A-18C, an article of manufacture, wherein the solid electro-optic medium has internal liquid- or gas –filled spaces (section 0061).

Allowable Subject Matter

3. Claims 2, 4, and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the independent claim(s), in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in claim(s) 2, 4, and 7, wherein the claimed invention comprises an electro-optic display wherein the lamination adhesive has a conductivity of less than about 10^{-10} S/cm in the plane of the adhesive layer and a conductivity greater than about 10^{-9} S/cm perpendicular to this plane; wherein the conductive particles have a conductivity greater than about 10^{-9} S/cm; wherein the matrix has a conductivity less than about 10^{-10} S/cm, as claimed.

Response to Arguments

5. Applicant's arguments with respect to claims 1-13 and 22-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandi N. Thomas whose telephone number is 571-272-2341. The examiner can normally be reached on 7- 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BNT

BNT
November 16, 2005

RICKY L. MACK
PRIMARY EXAMINER